

3. Waste (WS)

Waste treatment and recycling activities are major factors in creating a sustainable environment. The activities of university staff and students on campus will produce a lot of waste; therefore, some recycling and waste treatments programs should be among the concern of the university, i.e., recycling program, organic waste treatment, inorganic waste treatment, toxic waste recycling, sewage disposal, policies to reduce the use of paper and plastic on campus.

3.1. 3R (Reduce, Reuse, Recycle) program for university's waste (WS.1)

Please select a condition that reflects the current condition of your university's efforts to encourage staff and students to do 3R (Reduce, Reuse, Recycle) waste, from the following options:

- [1] None
- [2] 3R program in preparation
- [3] 3R program 1 - 50% implemented
- [4] 3R program > 50 - 75% implemented
- [5] 3R program > 75% implemented

Evidence is required

3.2. Total volume of paper and plastic produced this year (tons)

Please provide the total volume of paper and plastic produced in the last 12 months in your entire university area

Evidence is required

3.3. Total volume of paper and plastic produced last year (tons)

Please provide the total volume of paper and plastic produced in the last year in your entire university area

Evidence is required

3.4. Program to reduce the use of paper and plastic on campus (WS.2)

Please select one from the following options which best reflects the current condition of your university in establishing a formal policy to reduce the use of paper and plastic (i.e., double-sided printing policy program, the use of tumblers, the use of reusable bags, necessary print, reusable goodie bags, digital notes and books, paperless meetings, eco-friendly packaging etc.):

- [1] None
- [2] 1 - 3 programs
- [3] 4 - 6 programs
- [4] 7 - 10 programs
- [5] More than 10 programs

Evidence is required

3.5. Total volume organic waste produced this year (tons)

Please provide the total volume of organic waste produced in the last 12 months in your entire university area

Evidence is required

3.6. Total volume organic waste produced last year (tons)

Please provide the total volume of organic waste produced in the last year in your entire university area

Evidence is required

3.7. Total volume organic waste treated this year (tons)

Please provide the total volume of organic waste treated in the last 12 months in your entire university area

Evidence is required

3.8. Organic waste treatment (WS.3)

The method of organic waste (i.e., garbage, discarded vegetable, food, and plant matter) treatment in your university. The evidence provided may also include campus maps showing the location, area size, or distribution of facilities relevant to the indicators. Please select an option that best describes your university's overall treatment of the bulk of organic waste:

- [1] Open dumping
- [2] Partial (1 - 35% treated)
- [3] Partial (> 35 - 65% treated)
- [4] Partial (> 65 - 85% treated)
- [5] Extensive (> 85% treated)

Evidence is required

3.9. Total volume inorganic waste produced this year (tons)

Please provide the total volume of inorganic waste produced in the last 12 months in your entire university area

Evidence is required

3.10. Total volume inorganic waste produced last year (tons)

Please provide the total volume of inorganic waste produced in the last year in your entire university area

Evidence is required

3.11. Total volume inorganic waste treated this year (tons)

Please provide the total volume of inorganic waste treated in the last 12 months in your entire university area

Evidence is required

3.12. Inorganic waste treatment (WS.4)

Please describe the method of non-toxic inorganic waste (i.e., rubbish/garbage, trash, discarded paper, plastic, metal, electronic, etc.) treatment in your university. The evidence provided may also include campus maps showing the location, area size, or distribution of facilities relevant to the indicators. Please select an option that best describes your university's overall treatment of the bulk of the inorganic waste:

- [1] Burned in the open area
- [2] Partial (1 - 35% treated)
- [3] Partial (> 35 - 65% treated)
- [4] Partial (> 65 - 85% treated)
- [5] Extensive (> 85% treated)

Evidence is required

3.13. Total volume toxic waste produced this year (tons)

Please provide the total volume of toxic waste produced in the last 12 months in your entire university area

Evidence is required

3.14. Total volume toxic waste produced last year (tons)

Please provide the total volume of toxic waste produced in the last year in your entire university area

Evidence is required

3.15. Total volume toxic waste treated this year (tons)

Please provide the total volume of toxic waste treated in the last 12 months in your entire university area

Evidence is required

3.16. Toxic waste treatment (WS.5)

Please select a condition that reflects the current condition of how your university handles toxic wastes. For example, battery, fluorescent lamps, chemical waste, etc). The handling process includes whether toxic wastes are dealt with separately, for example, by classifying and handling them over to a third party or certified handling companies. The evidence provided may also include campus maps showing the location, area size, or distribution of facilities relevant to the indicators.

Please select one of the following options:

- [1] Not managed
- [2] Partial (1 - 35% treated)
- [3] Partial (> 35 - 65% treated)
- [4] Partial (> 65 - 85% treated)
- [5] Extensive (> 85% treated) or campus produces a minimum amount of toxic waste

Evidence is required

3.17. Sewage disposal (WS.6)

Please describe the primary method of sewage treatment at your university. The evidence provided may also include campus maps showing the location, area size, or distribution of facilities relevant to the indicators. Please select an option that best describes how the bulk of the sewage is disposed of:

- [1] Untreated into waterways
- [2] Treated with preliminary treatment
- [3] Treated with primary treatment
- [4] Treated with secondary treatment
- [5] Treated with tertiary treatment

Evidence is required

Note:

- **Preliminary Treatment:** consists of screening to remove large solids, grit removal to eliminate sand and other heavy materials, and oil and grease removal. Evidence can be documentation of grit chambers and screening facilities that remove large solids and debris before the sewage is discharged.
- **Primary Treatment:** includes sedimentation and coagulation-flocculation. Evidence can be diagrams or operational records of sedimentation tanks where physical processes remove settleable solids from the sewage
- **Secondary Treatment:** attached growth systems or suspended growth systems. Evidence can be reports or photos of biological treatment processes such as activated sludge systems or biofilters that further reduce organic matter in the sewage

- **Tertiary Treatment:** offers reusability options such as disinfection, filtration, and advanced oxidation to further purify the water for reuse in industrial processes or irrigation. Evidence can be water quality test results or system descriptions showing advanced filtration and disinfection processes that remove remaining impurities and pathogens before discharge.

3.18. Planning, implementation, monitoring and/or evaluation of all programs related to Waste Management through the utilization of Information and Communication Technology (ICT) (WS.7)

Please provide information regarding planning, implementation, monitoring, and/or evaluation of all programs related to waste management through the utilization of ICT on campus. We recommend dashboard to input your Waste data. Please select one of the following options

- [1] None
- [2] The program is currently in the planning stage
- [3] Program has been implemented
- [4] Program has been implemented and evaluated
- [5] Program has been implemented, evaluated, and is currently revised

Evidence is required

3.19. Impact of Waste Management programs in supporting the Sustainable Development Goals (SDGs).

Please indicate the extent to which your university's Waste Management (WS) programs contribute to the achievement of the UN Sustainable Development Goals (SDGs). Select the option that best reflects the number of SDGs directly supported by these programs. Please select one of the following options

- [1] Low impact (supporting 1–2 SDGs)
- [2] Moderate impact (supporting 3–5 SDGs)
- [3] Significant impact (supporting 6–9 SDGs)
- [4] High impact (supporting 10–13 SDGs)
- [5] Very high impact (supporting 14–17 SDGs)

Evidence is required

4. Water (WR)

Water usage on campus is another important indicator in the UI GreenMetric. The aims are to encourage universities to decrease groundwater usage, increase water conservation programs, and protect habitats. Water conservation programs, water recycling programs, water-efficient appliances usage, and treated water usage are among the criteria.

4.1. Water conservation program and implementation (WR.1)

Please select a condition describing your current stage in a program that is systematic and formalized, and supports water conservation (i.e., for lakes and lake management systems, rain harvesting systems, water tanks, bio pore, recharge well, etc.) in your university, from the following options. The evidence provided may also include campus maps showing the location, area size, or distribution of facilities relevant to the indicators.

- [1] None. Please select this option if the conservation program is needed, but nothing has been done.
- [2] Program in preparation
- [3] 1 - 25% water conserved
- [4] > 25 - 50% water conserved
- [5] > 50% water conserved

Evidence is required