تقرير التنمية المستدامة 2019

Environment and Sustainability Report

   The University of Baghdad keeps up with the international developments in the field of environment and sustainability. It responds to the change in the international standards and requirements, modifying them accordingly by adopting a flexible policy. Being aware of its responsibilities of the environmental impacts that are caused by its activities and having the desire to provide a better environment for the future generations, special objectives have been set to organize precautions for maintaining the environment and mitigating the effects of its activities turning the university environment to be eco-friendly, complying with the six GreenMetric criteria in the fields of Environment and Sustainability, in which our University has appeared for the second year consequently:

√ **University infrastructure.**

√ **Power management.**

√ **Solid and toxic waste management.**

√ **Water management.**

√ **Transport and road management.**

√ **Education and research.**

The policy of our University is to improve its environment by studying the strengths and weaknesses of the university environment according to the above axes in order to measure the progress achieved. 2017 is a year which is adopted as a basis for measuring the completion rates and potential challenges, because the data for this year documented the procedures used in accomplishing most of the items of the above mentioned axes. Such a thing required taking realistic and true procedues by the university administration, teaching staff, employees, and students. All these efforts together will lead to the sustainability of the University environmental resources, keeping pace with the recent developments and increasing environmental awareness among the university community. This requires setting up an accurate database concering all the environmental and sustainability issues of the University, which are stated as follows:

The first axis:

 University infrastructure

It requires accurate data about:

1- Specifying the sites of the University.

2-Measuring the total area of the university (all sites).

3- Total area of buildings which includes / area (first floor, total construction).

4 – Green area of the university.

5- Untapped areas in the university.

Recommendations of the study: Adopting database (1) proposed by the Department of Quality Assurance to the Department of Construction and Projects based on Greenmetric classification criteria.
The second axis:
Power Management
1- Using modern means to saving power.

2- Using the modern methods of smart buildings by using sensors for water taps, self-extinguishing of lighting, ... etc.

3-Types of power used in the university.

4- Power consumption.

5-Green buildings.

6- The use of clean power.

7- Measuring carbon dioxide emissions (Co2).

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Attactment (1): Database of the infrastructure

Study recommendations for the purpose of improvement
1- Applying certain procedures to ensure the efficiency of the power use in all new projects and buildings.

2 – Applying power efficiency standards gradually in the existing buildings by directing procurement committees to provide economic instruments.

3 -Working with academics to use their expertise in problem solving and implementing effective solutions.

4 –Raising the students and employees' wareness concerning power saving and holding workshops to train them.

5- Installation of sub-meters for the colleges to measure the use of power to determine the points of consumption and saving.

6- Direct the Department of Construction and Projects to prepare a study about the consumption of electrical power in the formations of the university * and the transition to alternative power.

7- Setting meters to measure the consumption of electrical power for each formation in the complex of Jadiriya in detail.

8- Honoring the formation which uses modern means to reduce the consumption of electric power by using the alternative power sources.

9- Setting and implementing a plan for the use of eco-friendly transportations

10- Developing a plan to reduce carbon emissions.

11-Re-operating the cooling system and central heating because of their impact on reducing the consumption of electricity and saving the enviroment .

Third Axis:
Solid and toxic garbage management
It requires accurate data about

1- The university program for recycling of all kinds of garbage.

2- The university program used to reduce the consumption of paper and plastics in the university as well as to raise awareness of their risks

3-Processing organic and inorganic substances.

4- Storaging toxic substances and identifying the methods used in the university to get rid of them.

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1)there is a large waste of electricity consumption rates which reaches up to 8500 MW monthly.

<u>**Study recommendations for improvement**</u>
1- Collecting data concerning the type and quantity of solid and toxic garbages generated in the campus.

2 -The necessity of establishing projects for sorting organic and inorganic garbage and how to get benefit from them.

3 -Forming teams of volunteers (students, employees and teaching staff members) to assist in the garbage management plan

4-Activating the committees of eco-friend tasks.

5- Building and developing the capabilities of the staff members at the university, especially in the Department of Diwan Affairs, concerning the integrated garbage management.

6- Educating students and staff to use an official policy to deal with paper and plastic (such as putting guidelines ads. about the rational use of paper to reduce consumption, and raising awareness about the harmful use of plastic cups, paper and so on).

7-Cooperate with the Department of Diwan Affairs to supply containers in different colors (blue, red, yellow, green), which help in the process of sorting waste and develop a program to deal with a specific part of the garbage.

8- Activating the mechanism of toxic garbage storage and getting rid of them by the application of garbage sorting with the help of the relevant authorities inside and outside the university.

9- Recycling the sewage water in cooperation with the relevant authorities and finding solutions to get benefit from it.

10- Maximizing the university resources by getting benefit from the revenues of solid garbage (paper, cardboard, metal cans, plastic … etc).

<u>**Fourth Axis:**</u>

Water Management
Saving Water by improving water use and management.

1-Adopting water saving policy in the university.

2- Adopting the program for water recycling in the university.

3-Applying systems that reduce water consumption.

4 -Managing the amount of water that is saved and processed.

Study recommendations for improvement
1 –Encouraging the university formations to rationalize water use and increase saving programs.

2-Providing programs for recycling water and using the processed water for watering plants.

3- Setting up a policy to collect water from air conditioners and use it to irrigate plants.

4 -The use of faucets equipped with automatic sensors helps to significantly reduce water consumption.

5-Implementing awareness and coordination programs to increase the efficiency of water use and encourage students and employees to rationalize water consumption.

Fifth Axis:
Transportation and Roads Administration
Transportation management information requires the following data:
1- Number of cars owned by the University.

2- Number of cars and motorcycles entering the campus on a daily basis.

3- The availibilty of mass transportation services showing the following:

√ Bus route.

√ driving distance (km).

√ **Average number of passengers.**

4-The use of means of transportation that do not generate toxic gases (eco-friendly) such as (electric cars, bicycles).

5- Number and area of parking spaces inside and outside the compus.

6- The program adopted by the university to reduce the number of parking spaces during the past three years.

7-Types of transportation available in the compus.

8- Availability of an itinerary (for pedestrians and bicycles).

Study recommendations for improvement
1-submitting the issue of transportation in the campus for investment through the preparation of a feasibility study of the actual transportation on campus in terms of environmental damage and high maintenance cost.

2- Educate the participants to adopt walking and bicycles sport to move on campus and to reduce the use of private cars.

3- Putting maps of the streets , a road map for pedestrians and a road map for bicycles in the form of guidelines in the designated places on campus.

4- Setting up a university transportation policy such as sharing cars and bicycles.

5- The adoption of future projects serving the university in cooperation with the competent authorities (Secretariat of Baghdad, Baghdad Provincial Council), for example (Metro, tram).

Sixth axis:
Education and Research
It requires the following data:

1-Considering courses and researches on environment and sustainability an integral part of research initiatives.

2-Increasing the number of courses offered by the university annually.

3- Increasing the number of courses related to environment and sustainability.

4-Specifing allocations to the environment and sustainability in the University budget.

5- specifying the total amounts allocated for scientific research in general.

6-increasing the number of registered and private publications about the environment and sustainability.

7- increasing the number of scientific activities related to environment and sustainability (workshops, seminars, conferences, symposia and research).

Study recommendations for improvement
1-Increasing the environment and sustainability textbooks and encouraging scientific research.

2- Encouraging volunteer work and holding forums and setting activities for students.

3-Increasing the number of courses, workshops and seminars about environment and sustainability.

4 -Setting a budget for the environment and sustainability in the university budget.

5-Establishing a site for the environment and sustainability dealing with special activities such as researches , seminars , dissemination of lectures and volunteer work for students, etc., practiced by different formations of the university.

6. **Application of Social Responsibility Standard (26001).**