



Telafer University Annual Sustainability Report 2020-2021

Telafer university is established in June 2014, it located in the center of the two roads, the Mosul, Telafer, Senjar road (453.31 meters of the road) and the Mosul, Telafer, Al- Iyadia and Rabia road (500 meters of the road). Telafer University is constructed of 520900 square meters, far away from the center of the Nineveh province about 83 kilometres in the Telafer Township which is one of the districts belonging to the province of Nineveh.

Total area of the whole Campus is equal to (520900 m²), distributed into (51400 m²) represents the educational buildings, (22400 m²) refer to the residential buildings, (4700 m²) is the students center contain all services for the students, (4470 m²) is the University presidency building, (4600 m²) is the central library of the university, (4000 m²) is the conferences hall, (3400 m²) is the services part of the university, and (430500 m²) represents the open spaces. Total area of green spaces is (120000 square meter) (i.e. 22% of the whole spaces of the University).

The University of Telafer is under the building process since November 25, 2019, till now. there were forced immigration from 2014 till 2017 Acres. Currently, there are continuously working to build the presidency building with the two gates of the campus, also the fence around the whole area of 200 Acres of the university, it was expected to complete the project of rebuilding the above-mentioned objects by June 2021, but because of the COVID 19 quarantine situations, it was too difficult to finish the buildings in the limited time.

In 2021, Telafer University continued suffering from the quarantine because of series mutation of COVID 19, therefore, there were not regular permanency for students, for teaching staff, and for administrating staff. The methods of teaching were by the E-learning platforms (i.e. Google classroom), also the almost all meetings between the university's leadership and the other university's members were using hangout meetings either by Google Meet, Zoom platform and so on. Consequently, there were reducing the use of electrical appliances in general, and reducing the usage of energy-efficient appliances.

The strategy of Telafer University in the (2020 - 2021) is as that strategies that adopted last educational years, except the teaching was merged between E-

learning and partially attendants for the students and containing the following execution steps:

1- Transforming all the students that were in the Telafer's university internal departments to universities nearing to their areas of residence.

2- The use of private E-learning platforms (i.e. Google classroom), also the almost all meetings between the university's leadership and the other university's members were using hangout meetings either by Google Meet, Zoom platform, and so on.

All the above reasons led to reducing the electricity usage for the period (2020-2021) comparing to the conventional academic previous years to be (2450000 kWh) that was spent it for computer devices, printers, cooling, refrigerators, lighting, laboratory appliances... etc.

The following table describes the total carbon footprint on Telafer university on the view of the equations that were recommended by UI GreenMetric, the above values of the Carbon footprint was from September 2019 to September 2020:

Option 2: Recommended by UI GreenMetric

CO₂ (electricity)

$$= \frac{2450000 \text{ (kWh)}}{1000} \times 0.84$$
$$= 2058 \text{ metric tons}$$

CO₂ (cars)

$$= \frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,02$$
$$= \frac{13 \times 2 \times 10 \times 240}{100} \times 0.02$$
$$= 12.48 \text{ metric tons}$$

CO₂ (total)

$$= 2058 + 12.48$$
$$= 2070.48 \text{ metric tons}$$

Carbon footprint in 2021 = 2070.48 metric tons

Because of the spread of Palm trees, Telafer University project to reduce the use of plastic bags by replacing it by using the bags made of Palm wicker. in addition to that, the university of Telafer has an efficient policy to reduce the used paper in the daily workplace by reusable paper in the back offices (i.e. using 2-side of paper, always recheck our data before print, use online system instead of hard copies). As well as, there is an agreement with a waste recycling plant in Sulaymaniyah province to recycle papers and cardboard boxes to benefit from them for more than one uses.

Due to the fact that Telafer is an agricultural area and the presence of fields of wheat and barley in the region, we find that there is a need for water and fertilizers, in the light of these requirements, there was agreed between the University of Telafer and the Directorate of the Municipality of Telafar and the owners of the fields to deliver heavy water and organic waste to these fields in a programmed way. This provides a good opportunity for the University to dispose of these organic wastes while at the same time utilizing them in agriculture and cleaning the environment.

An agreement was reached between the University of Telafer and the Municipality of Telafer to connect the wastewater with the public sewerage network and transfer it to the agricultural fields in Telafer district.

Due to the fact that the district of Telafer within an Undulating plains region of Iraq, and the availability of natural depressions in the region. So, the basic design part of the campus was used to collect this rainwater from the university land in separate waterways and then used for watering crops and cleaning operations of the university buildings

Total main campus area: 520900 m²

Total open spaces area in the campus: 430500

Total parking area = 25830 m².

Ratio of parking area = 6% of the open spaces area in the campus.

During the quarantine period due to the Corona pandemic, the Electricity Corporation in the Telafer district took advantage of the opportunity of the pedestrian-free streets, including the facilities of Telafer University, so it renewed the electricity poles, lighting, intermediate islands, cables and electricity

transmission stations. The separator between road for vehicle and pedestrian path. Street lamp for the pedestrian in the night. presently, Telafer University has 75 lamps in its streets, also the local government of Telafer township provides lighting poles in all Telafer streets included the university.

The average of the total research fund dedicated to sustainability research in 2019-2020-2021 = 180000 US Dollars, while the average of the total research fund in 2019-2020-2021 = 425000 US Dollars

During 2020-2021, there were many events related to sustainability, including the following:

1- Disinfectant chambers have been provided on the main campus of the university and several faculty buildings. Meanwhile, the handwashing facilities placed near every entrance of buildings. Hand sanitiser containers place in every corner of the buildings, where handwashing facilities are in the whole building of the internal departments of the students and inside colleges buildings.

Facilities	Number of Facilities
Disinfectant chamber	5
Handwashing Facilities	100

$$\text{Question [4.5]} = \frac{105}{7} = 15$$

2- All facilities, laboratories, meeting rooms, and classrooms at Telafer University have been sterilized for several times due to repeated infections with the Coronavirus among university students and staff.

3- In the College of Agriculture, many activities were held, including the Arbor Day celebration, through which the university's gardens and parks were planted,

4-The teaching staff at the College of Agriculture were escorting the college's students on several field visits to the farms and fields of the Telafer district, for the purpose of introducing students to field crops and the diseases spread among these crops, in addition to assisting students of the last grade to complete their graduation projects.

5- The students of Basic Educational College and Nursing College are regularly make cleaning campaigns for all facilities of the Telafer University.

6- University of Telafer adopt to contribute many international workshops, Symposiums, and forums to improve the stratigy of the university to cope with COVED-19 pandemic.