



# Telafer University Annual Sustainability Report 2021-2022

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 m<sup>2</sup>), distributed into (51400 m<sup>2</sup>) represents the educational buildings, (22400 m<sup>2</sup>) refer to the residential buildings, (4700 m<sup>2</sup>) is the students center contain all services for the students, (4470 m<sup>2</sup>) is the University presidency building, (4600 m<sup>2</sup>) is the central library of the university, (4000 m<sup>2</sup>) is the conferences hall, (3400 m<sup>2</sup>) is the services part of the university, and (430500 m<sup>2</sup>) 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 as of November 25, 2019, till now. After the destroyed building of the Telafer University Campus by ISIS in 2014. 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, and intends to complete the presidency building and fence within December 2023.

In 2022 and after Corona pandemic waned, Telafer University recovered the teaching process by using merged teaching strategy between traditional teaching and the E-learning platforms (i.e. Google classroom), also almost half of the meetings between the university's leadership and the other university members were using hangout meetings either by Google Meet, Zoom platform and so on. Consequently, there was reducing the use of electrical appliances in general, and reducing the usage of energy-efficient appliances in particular.

The strategy of Telafer University in the (2021-2022) educational years containing the following execution steps:

- 1- Housing students who came to study from outside of the Tal Afar township in the university student housing.
- 2- The use of E-learning platforms (i.e. Google classroom), also the almost half of the 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 control the electricity usage for the period (2021-2022) to the (1560000 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 2021 to September 2022:

### **Option 2: Recommended by UI GreenMetric**

#### **CO<sub>2</sub> (electricity)**

$$= \frac{1560000 \text{ (kWh)}}{1000} \times 0.84$$
$$= 1310.4 \text{ metric tons}$$

#### **CO<sub>2</sub> (cars)**

$$= \frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,02$$
$$= \frac{260 \times 2 \times 5 \times 240}{100} \times 0.02$$
$$= 124.8 \text{ metric tons}$$

#### **CO<sub>2</sub> (total)**

$$= 1310.4 + 124.8$$
$$= 1435.2 \text{ metric tons}$$

**Carbon footprint in 2021 /2022 = 1435.2 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).

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 m<sup>2</sup>

Total open spaces area in the campus: 430500

Total parking area = 25830 m<sup>2</sup> .

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 total research fund dedicated to sustainability research in 2021-2022 = 140000 US Dollars, while the total research fund in 2021-2022 = 323000 US Dollars

During 2022, there were many events related to sustainability, including the following:

1- All facilities, laboratories, meeting rooms, and classrooms at Telafer University have been sterilized for several times.

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

3- The Unit of women empowering in the presidency of Telafer University has monthly visits to the Telafer general hospital and donates dozens of medical materials but not limited to:

- syringes, Canola, Types of medical threads, devices of Giving, paws for operations, feeders, and medical Cotton...etc.