

Beni-Suef University (BSU) Carbon Emissions' Plan



Management and Mitigation of carbon emissions at BSU

Our goal is to become one of the top universities in the MENA region and the world for sustainability. Launching in 2021, the university aims to draw up plans with a timetable to combat climate change on campus. BSU is committed to cut its emissions by 2030 and reach nearly net-zero emissions by 2050 in order to promote a society that is healthier, cleaner, and more just.

Finding a balance between the amount of greenhouse gases recovered and those released into the environment is necessary to reach net zero. Therefore, achieving net zero requires both reducing emissions and supporting carbon removal initiatives. As a result, BSU is already taking significant steps to assess its environmental impact and identify potential for carbon reduction and efficiency enhancements. The BSU has committed to achieving carbon neutrality by 2050 and investing an annual average of 48.68% of BSUs total budget in sustainability field.

To achieve our net zero emissions target, BSU is committed to participating in developing environmentally friendly infrastructure and the extent to which they take into account the infrastructure standard, the energy and climate change standard, the waste management standard, the water management standard, the transportation standard within the university, the environmental quality standard, and others. BSU is also committed to reducing further and incorporating sustainability into operations and curricula. At all, BSU is concerned with producing knowledge and impact that could have real-life implications not only for the university, but also for the wider community, through the following:

- 1- **Education:** it deals with issues of sustainability and directs students for the positive deal with the environment.
- 2- **Scientific Research:** it deals with sustainability issues and develops solutions for them.
- 3- **Community service:** through the raising of awareness of the importance of sustainability and defining the principles and goals of sustainability.

- 4- **Sustainable Campus:** Campus operations aim to limit the environmental impacts for various activities.

Tracking the University to fulfill its commitment to have zero emissions by 2050

Two major reports have been produced by the International Ranking and Sustainable Development Office in 2024, namely the Carbon Footprint Report for 2024, and the Sustainability Report for 2024. **Every two years,** BSU produces the Carbon Footprint Report that details the annual quantity of carbon dioxide (CO₂) and other key greenhouse gases (GHG) discharged into the atmosphere as a result of daily activities and campus operations. By calculating the quantity of greenhouse gases—the primary cause of global warming—that are emitted into the atmosphere annually, the Carbon Footprint Report serves as a tool for evaluating the environmental effect of businesses or operations. It is intended to guarantee that the University fulfills its pledge to have zero emissions by 2050.

Second, the University's Office of International Ranking and Sustainable Development produced the first edition of the Sustainability Report in 2023, to show its commitment to the environmental, social, and economic aspects of sustainability. BSU pays a great interest in supporting sustainability through research, education and application of sustainability in its plans and activities. BSU also helps decision-makers to acquire knowledge and skills, through the inclusion of sustainability issues in their curricula that can be done through the following:

1. Inclusion of sustainable development in all aspects and systems.
2. Linking the goals of sustainable development in an integrated manner by interdisciplinary faculties and institutes.
3. Encouraging research in the field of sustainable development.
4. Directing campus operations for sustainability.
5. Cooperation with other universities in the field of sustainability.
6. Cooperation with policy makers, governments, NGOs and entrepreneurs to achieve sustainability.

Impactful university projects on climate change

At BSU, green projects are divided into three primary categories:

- a. Various impactful initiatives, most of which includes student representation. For example, launching of youth for development initiative within the Human Development Forum. This initiative is sponsored with the Ministry of Planning and

Economic Development and in cooperation with the Supreme Council of Universities. The launching of the "Green Environment" initiative, by Faculty of Postgraduate Studies for Advanced Science in cooperation with the Drinking Water and Sanitation Company, and a number of charitable institutions, is another example.

- b. BSU has several research and educational programs aiming to deal with energy, water, waste and climate change by reduce greenhouse gas emission
- c. Actions taken by different sustainable centres, such as:
 - ***The Water Studies and Research Center at Faculty of Earth Science.***

It is one of the specialized centers at the level of Egyptian universities in conducting all studies related to the sustainable management of water resources (conventional and Unconventional, renewable and non-renewable) in terms of exploration, evaluation and purification and treatment and reuse as well as desalination, control and quality assurance for all Processes.

- ***Center for the Development of Means of Preserving the Environment in collaboration with International Ranking and Sustainable Development Office at BSU***

It can identify environmental problems in the province and work to solve them in a scientific manner to reduce them. It also establishes close cooperation with advisory offices, governmental and industrial bodies, and community and scientific institutions, to solve environmental problems and provide specialized technical advice. In addition, it actively contributes to the development and implementation of policies, whether at the governorate or national level.

- ***Centre of excellence in water research in cooperation with 5 Egyptian universities and 5 US universities funded from USAID***

It is concerned with Exchange and training, education, governance, sustainability and research. It develops scientific solutions to water problems from lack of supplies and pollution, and develops the infrastructure for water research laboratories. It is also concerned with the discussion of the current and future challenges, innovative solutions and outlook for industrial waste water treatment in Egypt. Beni-Suef University is the co-chair for the sustainability phase.

- ***The Central Laboratory and Environment and Water Lab at Faculty of Postgraduate Studies for Advanced Sciences***

It contains many devices and tools necessary to conduct analyzes and measurements of water pollutants, and analyzes for different companies and factories inside and outside Beni-Suef Governorate. It helps in making decisions and recommendations necessary to solve many

environmental problems related to water pollution and its negative impact on the health of the citizen, which consequently affects the national economy.

- ***The Excellence Center for the economic production of approved nanometric materials***

It aims to establish a small certified factory to produce specific and approved nanometric materials needed by society and by industry, to be an example of linking research with industry.

Conclusion

By launching BSU's carbon emission plan in 2021, BSU Campuses are expected to reach intermediary goal for 2030 and carbon neutrality on 2050.